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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,929

05/30/2006

Hideo Nagai

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52044

7590

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EXAMINER

RAO, SHRINIVAS H

ART UNIT

PAPER NUMBER

2814

MAIL DATE

DELIVERY MODE

11/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,929	Applicant(s) NAGAI, HIDEO	
	Examiner STEVEN H. RAO	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/30/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Acknowledgement is made of papers filed claiming priority from PCt/JP2004/019457 filed on December 17, 2004 which itself claims priority from Japanese patent Application No. 2003-428258 filed on December 24, 2003.

Information Disclosure Statement

The IDS filed on May 30, 2006 has been considered and the initialed PTO-1449 made of record in the E-Red folder.

Preliminary Amendment

Applicants' preliminary amendment filed on May 30, 2006 has been entered. Therefore claims 8 and 12 as amended by the amendment and Claims 1-7 and 9-11 and 13 as previously recited are currently pending in the Application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 to 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Durocher et al. (U.S. Patent Publication No. 2003/0160256 , herein after Durocher).

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With respect to claims 1 and 8 Durocher describes a semiconductor light emitting device comprising: a substrate(fig.9 # 41)(mounting substrate –cl. 8) ; a semiconductor multilayer structure formed on a first main surface of the substrate (FIG. 9 everything on top of 41) the semiconductor multilayer structure including a light emitting layer (fig. 9 # 59) ; a first electrode and a second electrode formed on the semiconductor multilayer structure, power being supplied to the semiconductor multilayer structure through the first electrode and the second electrode so as to cause the light emitting layer to emit light; (fig. 9 # 37,etc.)

a phosphor film covering at least a main surface of the semiconductor multilayer structure which faces away from the first main surface of the substrate; (fig. 7 # 65)

a first terminal and a second terminal formed on a second main surface of the substrate;

a first conductive member electrically connecting the first electrode to the first terminal; (fig. 9 # 59, para 0054) and a second conductive member electrically connecting the second electrode to the second terminal. (fig. 9 # 49, para 0048).

With respect to claim 2 Durocher describes the semiconductor light emitting device of Claim 1, wherein at least part of each of the first conductive member and the second conductive member is a plated-through hole provided in the substrate . (shown in fig. 4 #51, para 0048).

With respect to claims 3 and 6 Durocher describes the semiconductor light emitting device of Claim 2, wherein the semiconductor multilayer structure is divided into a plurality of portions by a division groove that is deep enough to reach the substrate, and each of the plurality of portions is constituted as an independent light emitting element. (fig. 13).

With respect to claims 4 and 7 Durocher describes the semiconductor light emitting device of Claim 3, wherein the light emitting element has a diode structure,(Para 0082) and includes an anode electrode and a cathode electrode, (inherent in ever diode) a plurality of light emitting elements are connected in series in such a manner that a cathode electrode of a light emitting element is connected to an anode electrode of a different light emitting element using a wire formed by a thin metal film, (fig. 9 # 59) and an anode electrode of a light emitting element at a higher potential end of an array of the plurality of light emitting elements is constituted as the first electrode, and a cathode electrode of a light emitting element at a lower potential end of the array is constituted as the second electrode.(para 0063, inherent every diode has to have either anode or cathode at higher potential for the device to function as diode and emit light).

With respect to claim 5 Durocher describes the semiconductor light emitting device of Claim 1, wherein at least part of each of the first conductive member and the second conductive member is a conductive film formed on a side surface of the substrate.(fig. 12 portion below 63)

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With respect to claim 6 Durocher describes the semiconductor light emitting device of Claim 5, wherein the semiconductor multilayer structure is divided into a plurality of portions by a division groove that is deep enough to reach the substrate, and each of the plurality of portions is constituted as an independent light emitting element. (fig. 13).

With respect to claim 9 Durocher describes the lighting module of Claim 8 further comprising: a reflective mirror surrounding a semiconductor multilayer structure of the semiconductor light emitting device (claim 31, figs., etc.) so as to reflect light emitted from a side surface Of the semiconductor multilayer structure in a direction substantially perpendicular to a first main surface of a substrate.

The recitation, "so as to reflect light emitted from a side surface Of the semiconductor multilayer structure in a direction substantially perpendicular to a first main surface of a substrate." is taken to be a functional /particular use recitation for which patentable weight cannot be given.

It is elementary that the mere recitation of a newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to distinguish over the prior art. Additionally, where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on. In re Swinehart, 169 USPQ 226 (CCPA 1971).

With respect to claim 10 Durocher describes the lighting module of Claim 9, wherein the mounting substrate has a depression which increases in diameter from a bottom to an open end, the reflective mirror is a reflective film provided on a wall of the depression, and the semiconductor light emitting device is mounted on the bottom of the depression.(Figs. 9 to 16).

With respect to claims 11 and 12 Durocher describes a lighting apparatus including a lighting module defined in Claim 8 as a light source. (figs.)

With respect to claim 13 Durocher describes a manufacturing method for a semiconductor light emitting device, comprising steps of:
forming a semiconductor multilayer structure including a light emitting layer on one of main surfaces of a substrate; (fig.4) dividing the semiconductor multilayer structure into a plurality of portions each of which corresponds to the semiconductor light emitting device; (fig. 13) forming a phosphor film on and around each of the plurality of portions

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of the semiconductor multilayer structure; (figs. # 65) and dividing the substrate for each of the plurality of portions. (Fig. 13).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN H. RAO whose telephone number is (571)272-1718. The examiner can normally be reached on 8.30-5.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1714. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven H Rao/
Examiner, Art Unit 2814

/Howard Weiss/
Primary Examiner, Art Unit 2814